## CLAIM(S)

What is claimed is:

15

20

25

- Process comprising pyrolyzing hydrochlorofluorocarbon or
  hydrofluorocarbon to fluoromonomer, said pyrolyzing being carried out in a reaction zone lined with mechanically supported nickel.
  - 2. The process of claim 1 wherein said hydrochlorofluorocarbon includes chlorodifuoromethane.
- The process of claim 2 wherein said hydrochlorofluorocarbon also
  includes CF<sub>2</sub>CICF<sub>2</sub>H.
  - 4. The process of claim 1 wherein said pyrolysis is carried out to a conversion of said hydrochlorofluorocarbon of about 10 to 50%.
  - 5. The process of claim 1 wherein said pyrolysis is carried out at a temperature of about 600°C to 750°C, with the proviso that when said hydrofluorocarbon is being pyrolyzed the temperature is about 750°C to 900°C.
  - 6. The process of claim 1 wherein said pyrolysis is carried out at a residence time in said reaction zone of less than about 0.1 second, with the proviso that when said hydrofluorocarbon is being pyrolyzed the residence time is less than about 2 seconds.
    - 7. The process of claim 1 wherein said fluoromonomer includes tetrafluoroethylene.
  - 8. The process of claim 1 wherein said reaction zone is tubular in cross-section and the mechanical support for said nickel lining is a metal jacket for said lining.
  - 9. The process of claim 1 wherein said reaction zone is annular in cross-section.
  - 10. The process of claim 1 wherein said reaction zone has a volume of at least about 0.04 m<sup>3</sup>.
- 30 11. The process of claim 1 wherein said reaction zone has a length of at least about 8 m.